

ABSTRACT OF THE DISCLOSURE

A method for categorizing a set of objects includes defining a set of categories in which at least one category in the set is dependent on another category in the set; organizing the set of categories in a hierarchy that embodies any dependencies among the categories in the set; for each object, assigning to the object one or more categories $l_1 \dots l_p$, where $l_i \in \{1 \dots L\}$ from a set $\{1 \dots L\}$ of possible categories, wherein the assigned categories represent a subset of categories for which the object is relevant; defining a new set of labels z comprising all possible combinations of any number of the categories, $z \in \{\{1\}, \{2\}, \dots \{L\}, \{1,2\}, \dots \{1,L\}, \{2,3\}, \dots \{1,2,3\}, \dots \{1,2, \dots L\}\}$, such that if an object is relevant to several categories, the object must be assigned the label z corresponding to the subset of all relevant categories; and assigning to the object the several categories and the subcategories of the several categories.